Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

1622
27M68
op. 3

RESEARCH at the INSTITUTE of FOREST GENETICS - a BIBLIOGRAPHY, 1927-1961

LUCILLE M. TICHENOR

U. S. DEPT. OF AGRICULTURE
LIBRARY
AUG 17 1962
CURRENT SERIAL RECORDS

U.S.D.A., NAL
SEP 11 2008
CATALOGING PREP

PACIFIC SOUTHWEST
FOREST AND RANGE
EXPERIMENT STATION
BERKELEY, CALIFORNIA

MISCELLANEOUS PAPER No. 66

1962

FOREST SERVICE - U. S. DEPARTMENT OF AGRICULTURE

RESEARCH AT THE INSTITUTE OF FOREST GENETICS,

A BIBLIOGRAPHY, 1927 - 1961

Compiled by

Lucille M. Tichenor

Miscellaneous Paper No. 66 1962
U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE
PACIFIC SOUTHWEST FOREST AND RANGE EXPERIMENT STATION
BERKELEY, CALIFORNIA

RESEARCH AT THE INSTITUTE OF FOREST GENETICS, A BIBLIOGRAPHY, 1927 - 1961

Compiled by
Lucille M. Tichenor

The 221 articles in this publication are the results of research work done at the Institute of Forest Genetics, Placerville, California, by staff members and visitors from all parts of the world. The names of staff members are underlined.

ANONYMOUS.
(1) 1932 The pollination of pine flowers. Science 76(1974):9.

AUSTIN, L.
(2) 1927 A new enterprise in forest tree breeding. Jour. Forestry 25(8):928-953.
(3) 1928 Breeding pines for more rapid growth. Jour. Hered. 19(7): 289-301.
(4) 1928 Experiments at Eddy Tree Breeding Station. Timberman 29(7): 42, 44.
(5) 1929 The Eddy Tree Breeding Station. Madroño 1(15):203-212.
(6) 1932 Eddy Tree Breeding Station carries on under new name. Forest Worker 8(2):10.
(7) 1932 Hereditary variations in western yellow pine. Madroño 2(7): 62-63.
(8) 1932 Pine and walnut breeding for timber production. VI Internatl. Genet. Cong. Proc. 1932(2):2-4.
(9) 1932 Tree breeding for timber production. VI Internatl. Genet. Cong. Proc. 1932(2):387-388.
(10) 1937 The Institute of Forest Genetics; a new science utilized to advance American forestry. Amer. Forests 43(9):444-446, 466-467, illus.
(11) 1938 Work of the Institute of Forest Genetics. Planting Quart. 7(3):1-3.
(12) 1938 Forest Genetics Smithsonian Institution, Pub. No. 3512:433-440, illus.

AUSTIN, L., YUILL, J. S., and BRECHEEN, K. G.
(13) 1945 Use of shoot characters in selecting ponderosa pines resistant to resin midge. Ecology 26(3):288-296, illus.

BINGHAM, R. T., SQUILLACE, A. E., and DUFFIELD, J. W.
(14) 1953 Breeding blister rust-resistant western white pine. Jour. Forestry 51(3):163-168, illus.

BLANKENSOP, C. M., and CALLAHAM, R. Z.
(15) 1960 Rooting cuttings from Douglas-fir, white fir, and California red fir Christmas trees. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Res. Note 160. 3 pp.

BOUVAREL, P.
(16) 1952 L'amelioration des arbres forestiers aux Etats-Unis. L' Institut de Genetique forestiere de Placerville (Californie). Annales de l'Ecole Nationale des Eaux et Forets et de la Station de Recherches et Experiences XIII: 212-266.

BUCHHOLZ, J. T.
(17) 1944 The cause of sterility in cross-pollination between certain species of pines. Amer. Jour. Bot. 31(8): sup. p. 2s.
(18) 1945 Embryological aspects of hybrid vigor in pines. Science 102(2641):135-142, illus.
(19) 1946 Volumetric studies of seeds, endosperms and embryos in *Pinus ponderosa* during embryonic differentiation. Bot. Gaz. 108(2):232-244, illus.

BUCHHOLZ, JOHN T., and STIERMERT, M. L.
(20) 1945 Development of seeds and embryos in *Pinus ponderosa* with special reference to seed size. Illinois Acad. Sci. Trans. 1945(38):27-50.

CALIFORNIA FOREST AND RANGE EXPERIMENT STATION.
(21) (n.d.) Forest genetics--an expanding field of research. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. 13 pp.
(22) 1951 Visitors' Guide to the Institute of Forest Genetics. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Misc. Paper 5. 4 pp., illus.

CALLAHAM, R. Z.
(23) 1956 Needle oils of three pine species and species hybrids. Forest Science 2(2):101-105.
(24) 1957 Better trees through systematic breeding. 33rd. Natl. Shade Tree Conf. Proc. 1957:272-275.
(25) 1959 Selecting the proper seed source of ponderosa pine. Society of Amer. Foresters Proc. 1959:26-27.
(26) 1960 Observations of pine susceptibility to weevils. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Tech. Paper 51. 12 pp.
(27) 1961 Experimental taxonomy: More than seed source studies. In Recent Advances in Botany, pp. 1695-1699, Univ. of Toronto Press.
(28) (n.d.) Resistance of three interspecific hybrids to *Cronartium ribicola*. Jour. Forestry [In press]

CALLAHAM, R. Z., Cont'd.

(29) (n.d.) Geographic variability in growth of forest trees. Paper presented at Internatl. Conf. on Forest Tree Growth, Tucson, Ariz. 1960. [Proc. in press]

CALLAHAM, R. Z., and DUFFIELD, J. W.

(30) 1961 Stretching the pollen supply. Jour. Forestry 59(3):204-207, illus.

CALLAHAM, R. Z., and HASEL, A. A.

(31) 1957 Height growth of ponderosa pine progenies. Soc. Amer. Foresters Proc. 1957:61-62.

(32) 1961 *Pinus ponderosa* height growth of wind-pollinated progenies. Silvae Genetica 10(2):33-42, illus.

CALLAHAM, R. Z., and LIDDICOET, A. R.

(33) 1961 Altitudinal variation at 20 years in ponderosa and Jeffrey pines. Jour. Forestry 59(11):814-820, illus.

CALLAHAM, R. Z., and METCALF, WOODBRIDGE.

(34) 1959 Altitudinal races of *Pinus ponderosa* confirmed. Jour. Forestry 57(7):500-502, illus.

COLWELL, R. N.

(35) 1956 The use of radioactive isotopes in determining spore distribution patterns. Amer. Jour. Bot. 38(7):511-523, illus.

COOK, S. A., and STANLEY, R. G.

(36) 1960 Tetrazolium chloride as an indicator of pine pollen germinability. Silvae Genetica 9(5):134-136.

CUMMING, W. C., and RIGHTER, F. I.

(37) 1948 Methods used to control pollination of pines in the Sierra Nevada of California. U.S. Dept. Agr. Cir, 792. 18 pp., illus.

DAY, BESSE B., and AUSTIN, LLOYD.

(38) 1939 A three-dimensional lattice design for studies in forest genetics. Jour. Agr. Res. 59(2):101-119, illus.

(39) 1941 The use of the three-dimensional quasi-factorial design for testing a large number of *Pinus ponderosa* varieties. VII Internatl. Genet. Cong. Proc. 1941:98-99.

DUFFIELD, J. W.

(40) 1946 Review of "Plant Growth" by L. Edwin Yocum. Jour. Forestry 44(4):302-303.

(41) 1947 Dates and places of pollen collection by the Institute of Forest Genetics. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 54. 5 pp.

DUFFIELD, J. W., Cont'd.

(42) 1947 Review of "La Spermintazione di specie forestali esotiche in Italia. Resultali del primo ventennio." by Aldo Pavari and A. De Philippis. Jour. Forestry 45(1):54-56.

(43) 1948 Review of "Human breeding and survival. Populations roads to peace and war." by G. I. Burch and E. Pendell. Jour. Forestry 46(4):311-312.

(44) 1949 The pines of the Eddy Arboretum. Univ. Wash. Arboretum Bul. 12(4):17-20.

(45) 1949 Breeding forest trees. Natl. Shade Tree Conf. Proc. 1949 (25):234-242.

(46) 1950 Techniques and possibilities for Douglas-fir breeding. Jour. Forestry 48(1):41-45.

(47) 1952 Relationships and species hybridization in genus *Pinus*. Ztschr. f. Forstg. u. Forstpflanzenz. 1(4):93-97, illus.

(48) 1953 Pine pollen collection dates--annual and geographic variation. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 85. 9 pp.

(49) 1953 It's the ancestor that makes the tree. American Forests 59(11):37, 46-47.

(50) 1954 Studies of extraction, storage, and testing of pine pollen. Ztschr. f. Forstg. u. Forstpflanzenz. 3(2):39-45.

DUFFIELD, J. W., and CALLAHAM, R. Z.

(51) 1959 Deep-freezing pine pollen. Silvae Genetica 8(1):22-24.

DUFFIELD, J. W., and CUMMING, W. C.

(52) 1949 Does *Pinus ponderosa* occur in Baja California? Madroño 10(1):22-24.

DUFFIELD, J. W., and LIDDICOET, A. R.

(53) 1949 Variability of rooting in a small second generation population of the hybrid *Pinus attenuradiata*. Jour. Forestry 47(2):107-109.

DUFFIELD, J. W., and RIGHTER, F. I.

(54) 1953 Annotated list of pine hybrids made at the Institute of Forest Genetics. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 86. 9 pp.

DUFFIELD, J. W., and STOCKWELL, PALMER.

(55) 1949 Pine breeding in the United States. U.S. Dept. Agr. Yearbook, 1949. pp. 146-153.

FIELDING, J. M.

(56) 1950 The Institute of Forest Genetics. Australian Forestry. 14:43-46.

FOOTE, P. A., and MIROV, N. T.

(57) 1933 A phytochemical investigation of the oleoresin of *Pinus monticola* Dougl. Jour. Amer. Pharm. Assoc. 22(9): 825-834.

FRONTERA MARQUES, BARTOLOME.

(58) 1950 Practica de la pollinizacion artificial en los piños. Montes VI(32):166-174.

GIFFORD, E. M., and MIROV, N.T.

(59) 1960 Initiation and ontogeny of the ovulate strobilus in ponderosa pine. Forest Science 6(1):19-25, illus.

HAAGEN-SMIT, A. J., REDEMANN, C. T., and MIROV, N. T.

(60) 1947 Composition of gum turpentine of Torrey Pine. Amer. Chem. Soc. Jour. 69(8):2014-2017.

HAAGEN-SMIT, A. J., REDEMANN, C. T., WANG, T. H., and MIROV, N. T.

(61) 1950 Composition of gum turpentines of pines: a report on *Pinus ponderosa*, *P. banksiana*, *P. canariensis*, and *P. washoensis*. Jour. Amer. Pharm. Assoc., Sci. Ed. 39(5):260-265.

HAAGEN-SMIT, A. J., WANG, T. H., and MIROV, N. T.

(62) 1950 Composition of gum turpentines of *Pinus aristata*, *P. balfouriana*, *P. flexilis*, and *P. parviflora*. Jour. Amer. Pharm. Assoc., Sci. Ed. 39(5):254-259.

(63) 1951 Composition of gum turpentines of pines, XIII. A report on *P. albicaulis*. Jour. Amer. Pharm. Assoc., Sci. Ed. 40(11): 557-559.

HALL, R. C.

(64) 1959 Field tests of the resistance of hybrid pine to the pine reproduction weevil. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Tech. Paper 33. 21 pp.

HODGKINS, E. J.

(65) 1952 Effect of different heat treatments upon the viability and vigor of pine pollen. Jour. Forestry. 50(6):450-452, illus.

HYUN, SIN KYU.

(66) 1954 Induction of polyploidy in pines by means of colchicine treatment. Silvae Genetica 3(2):25-33, illus.

ILOFF, P. M., and MIROV, N. T.

(67) 1953 Composition of gum turpentines of pines, XVI. A report on *P. oocarpa* and *P. pseudostrobus* var. *oaxacana* from Chiapas and *P. cooperi* from Durango. Jour. Amer. Pharm. Assoc., Sci. Ed. 42(1):46-49.

(68) 1953 Composition of gum turpentines of pines, XVII. A report on *Pinus montezumae* from Chiapas and *P. oocarpa* var. *trifoliata* and *P. durangensis* from Durango, Mexico. Jour. Amer. Pharm. Assoc., Sci. Ed. 42(8):464-467.

ILOFF, P. M., and MIROV, N. T., Cont'd.

(69) 1954 Composition of gum turpentines of pines, XIX. A report on *Pinus ponderosa* from Arizona, Colorado, South Dakota, and northern Idaho. Jour. Amer. Pharm. Assoc., Sci. Ed. 43(6):373-378.

(70) 1954 Composition of gum turpentines of pines, XXI. A report on *Pinus quadrifolia* from southern California, *P. lumholtzii* from Durango, Mexico, and *P. caribaea* from Nicaragua. Jour. Amer. Pharm. Assoc., Sci. Ed. 43(12):738-741.

(71) 1954 Composition of gum turpentines of pines, XXII. A report on *Pinus rudis* and *P. hartwegii* from Mexico and *P. insularis* from Philippines. Jour. Amer. Pharm. Assoc., Sci. Ed. 43(12):742-745.

(72) 1955 Composition of gum turpentine of pines, XXVII. A report on three Mexican pines: *Pinus pringlei* and *P. michoacana* from Michoacan and *P. arizonica* from Chihuahua. Jour. Amer. Pharm. Assoc., Sci. Ed., 45(3):167-170.

(73) 1956 Composition of gum turpentines of pines, XXV. A report on two white pines: *Pinus koraiensis* from Korea and *P. peuce* from Macedonia. Jour. Amer. Pharm. Assoc., Sci. Ed. 45(2):77-81.

INSTITUTE OF FOREST GENETICS.

(74) 1932 Science seeks new trees for the forests of the future. Institute of Forest Genetics, Placerville, Calif. 23 pp., illus.

KENG, HSUAN, and LITTLE, E. L., JR.

(75) 1961 Needle characters of hard pines at the Institute of Forest Genetics. Silvae Genetica 10(5):131-146, illus.

KIMBROUGH, E. F.

(76) 1949 Making paper tubes for plant propagation. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 59. 5 pp., illus.

LANNER, R. M.

(77) 1961 A deodar cedar plantation in southern California. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Res. Note 175. 4 pp.

LIBBY, W. J.

(78) 1958 The backcross hybrid Jeffrey X (Jeffrey X Coulter) pine. Jour. Forestry 56(11):840-842, illus.

LIDDICOET, A. R.

(79) 1948 *Pinus*: pollination bag construction. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 57. 4 pp., illus.

LIDDICOET, A. R., Cont'd.
(80) 1956 Humidity control unit for greenhouses and propagating beds. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 112. 3 pp., illus.

LIDDICOET, A. R., and KIMBROUGH, E. F.
(81) 1947 Pinus: propagation of experimental stock. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 56. 8 pp., illus.

LIDDICOET, A. R., KIMBROUGH, E. F., and CARPENDER, E. J.
(82) 1953 Ponderosa pine plantation pruning. Jour. Forestry 51(4): 275-276, illus.

LIDDICOET, A. R., and RIGHTER, F. I.
(83) 1961 Trees of the Eddy Arboretum. Rev. Ed. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Misc. Paper 43. 41 pp.

McMINN, H. E., BABCOCK, E. B., and RIGHTER, F. I.
(84) 1949 The Chase oak, a new giant hybrid oak from Santa Clara County, California. Madroño 10(2):51-55, illus.

MASON, H. L., and STOCKWELL, W. P.
(85) 1945 A new pine from Mount Rose, Nevada. Madroño 8(2):61-63.

MILLER, J. M.
(86) 1947 Hybrid pine may prove answer to pine weevil menace. The Timberman 52, 54, 56, illus.
(87) 1950 Resistance of pine hybrids to the pine reproduction weevil. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 68. 17 pp., illus.

MIROV, N. T.
(88) 1936 Germination behavior of some California plants. Ecology 17(4):667-672.
(89) 1936 A note on germination methods for coniferous species. Jour. Forestry 34(7):719-723.
(90) 1937 Application of growth hormones in forest nurseries. Planting Quart. 6(3):18.
(91) 1937 Application of plant physiology to the problems of forest genetics. Jour. Forestry 35(9):840-844.
(92) 1937 Certain phases of enzyme activity in seeds. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Tech. Note 7. 11 pp.
(93) 1938 Phylogenetic relations of Pinus jeffreyi and Pinus ponderosa. Madroño 4(6):169-171.
(94) 1938 Vegetative propagation of white pine as a possible method of blister rust control. Jour. Forestry 36(8):807-808.
(95) 1940 Additional data on collecting and propagating the seeds of California wild plants. U. S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 21. 17 pp.

MIROV, N. T., Cont'd.

(96) 1940 Tested methods of grafting pines. Jour. Forestry 38(10):768-777, illus.

(97) 1941 Distribution of growth hormone in shoots of two species of pine. Jour. Forestry 39(5):457-464.

(98) 1941 Forest Genetics: present status and outlook for the future. VI Pacific Sci. Cong. Proc. 1939(4):727-730.

(99) 1942 Possibility of simple biochemical tests for differentiation between species of genus *Pinus*. Jour. Forestry 40(12):953-954.

(100) 1943 Can branch cuttings of conifers develop into straight trees? Jour. Forestry 41(5):369-370.

(101) 1943 Storage and germination of California cork-oak acorns. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 36. 18 pp., illus.

(102) 1944 Experiments in rooting pines in California. Jour. Forestry 42(3):199-204.

(103) 1944 Possible relation of linolenic acid to the longevity and germination of pine seed. Nature 154(3902):218-219.

(104) 1945 Effect of the crown on the composition of oleoresin in pines. Jour. Forestry 43(5):345-348, illus.

(105) 1946 *Pinus*: a contribution of turpentine chemistry to dendrology and forest genetics. Jour. Forestry 44(1):13-16.

(106) 1946 Viability of pine seed after prolonged cold storage. Jour. Forestry 44(3):193-195.

(107) 1946 Composition of gum turpentine of Coulter pine. Indus. Engin. Chem. 38(4):405-408, illus.

(108) 1946 Review of "Fundamentals of forest typology (Osnovy Lesnoi Typologii)" by P. S. Pogrebniak, V. E. Schmidt, N. I. Kaluzhski, and L. N. Verbitski. Jour. Forestry 44(3):219-220.

(109) 1947 Composition of gum turpentine of Bishop pine. Jour. Forestry 45(9):659-660.

(110) 1948 The terpenes (in relation to the biology of genus *Pinus*). Ann. Rev. Biochem. 17:521-540.

(111) 1949 A tree is a living thing. U.S. Dept. Agr. Yearbook,1949. pp. 1-10, illus.

(112) 1950 Simmondsia--Desert shrub offers new uses, from cover crop to wax. Chemurgic Digest 9(7):7, 8, 9, illus.

(113) 1951 Composition of gum turpentines of pines. A report on *Pinus echinata*, *P. rigida*, and *P. ponderosa* from Utah. Jour. Amer. Pharm. Assoc., Sci. Ed. 40(8):410-413.

(114) 1951 Composition of gum turpentines of pines, XII. A report on *P. montezumae*, *P. oocarpa*, and *P. leiophylla*. Jour. Amer. Pharm. Assoc., Sci. Ed. 40(11):550-551.

(115) 1951 Inducing early production of pine pollen. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 80. 3 pp., illus.

(116) 1951 Composicion quimica del aguarras de los tres pinos de Michoacan. El Mensajero Forestal. Nov. 1951:5, 16.

MIROV, N. T., Cont'd.

(117) 1952 Simmondsia or Jojoba. A problem of economic botany. Econ. Bot. 6(1):41-47, illus.

(118) 1952 Mr. Pince's Mexican pine. Madroño 11:270-273, illus.

(119) 1952 Composition of gum turpentines of pines, XIV. A report on three Mexican pines: *P. ayacahuite*, *P. cembroides*, and *P. pinceana*. Jour. Amer. Pharm. Assoc., Sci. Ed. 41(12): 673-676.

(120) 1952 Composition of gum turpentine of pines, XV. A report on *P. resinosa* and *P. reflexa*. Jour. Amer. Pharm. Assoc., Sci. Ed. 41(12):677-679.

(121) 1953 Chemical aspects of Diploxylon pines. Ztschr. f. Forstg. u. Forstpflanzenz. 2(5):93-96, illus.

(122) 1953 Taxonomy and chemistry of the white pines. Madroño 12(3): 81-89, illus.

(123) 1954 Lodgepole pine discovered and misnamed. Madroño 12(5): 156-157.

(124) 1954 Studies of the chemical composition of turpentine of the genus *Pinus* in relation to taxonomy. VIII Internatl. Bot. Cong. Proc. 1954:47-49.

(125) 1954 Apache pine and its relation to ponderosa pine. Madroño 12(8):251-252.

(126) 1954 Chemical composition of gum turpentines of pines of the United States and Canada. Jour. Forest Prod. Res. Soc. 7(1):1-7.

(127) 1954 Composition of turpentines of Mexican pines. Unasylva 8(4): 167-173 (In English. Also published in French and Spanish.)

(128) 1955 Relationships between *Pinus halepensis* and other Insignes pines of the Mediterranean region. Bul. Res. Council of Israel 5D(1):65-72, illus.

(129) 1956 Photoperiod and flowering of pines. Forest Sci. 2(4):328-332.

(130) 1956 Composition of turpentine of lodgepole and jack pine hybrids. Canad. Jour. Bot. 34:443-457, illus.

(131) 1957 Composition of gum turpentine of pines, XXX. A report on *Pinus serotina*, *P. tenuifolia*, and *P. yunnanensis*. Jour. Amer. Pharm. Assoc., Sci. Ed. 47(6):410-413.

(132) 1958 *Pinus oaxacana*, a new species from Mexico. Madroño 14(5): 145-150, illus.

(133) 1958 The physiology of forest trees. Distribution of turpentine components among species of the genus *Pinus*. pp. 251-268, New York.

(134) 1958 Chemistry in the service of silviculture. Soc. Amer. Foresters Proc. 1958:144-145.

(135) 1959 Biochemical geography of genus *Pinus*. IX Internatl. Bot. Cong. Proc. 1959:I, II, IIA, 1 p.

(136) 1959 Fragrance of pines. Atlantic Monthly Sept.:60-61.

(137) 1960 Cosmic rays and old pine stumps. Amer. Forests June:30, 31, 54.

(138) 1960 Horticultural values of pines. Jour. Calif. Hort. Soc. XXI(1):14-15.

(139) 1960 A strange forest tale. Amer. Forests Aug.:48-50, illus.

(140) 1960 Review of "The physiology of forest trees" edited by Kenneth V. Thimann and others. Madroño 15(6):192

MIROV, N. T., Cont'd.

(141) 1961 Composition of gum turpentines of pines. U.S. Dept. Agr. Tech. Bul. 1239. 158 pp., illus.

(142) (n.d.) Some taxomonic problems of tropical pines. Paper presented at Internatl. Union of Forest Res. Organ. Conf. Vienna, 1961. [Proc. in press]

MIROV, N. T., and BLANKENSOP, C. M.

(143) 1958 A note on propagation of *Torreya Californica*. Jour. Calif. Hort. Soc. 19(1):15.

(144) 1959 A note on rooting cuttings of dawn redwood. Jour. Calif. Hort. Soc. 20(1):9-10.

MIROV, N. T., and CUMMING, W. C.

(145) 1945 Propagation of cork oak by grafting. Jour. Forestry 43(8): 589-591.

MIROV, N.T., DUFFIELD, J. W., and LIDDICOET, A. R.

(146) 1952 Altitudinal races of ponderosa pine. A 12-year progress report. Jour. Forestry 50(11):825-831, illus.

MIROV, N. T., and HAAGEN-SMIT, A. J.

(147) 1949 Composition of gum turpentine of knobcone pine. Jour. Forestry 47(9):721-722.

MIROV, N. T., HAAGEN-SMIT, A. J., and THURLOW, J.

(148) 1949 Composition of gum turpentine of *Pinus lambertiana*. Jour. Amer. Pharm. Assoc., Sci. Ed. 38(7):407-408.

MIROV, N. T., and ILOFF, P.M., JR.

(149) 1954 Composition of gum turpentines of pines, XX. A report on *Pinus chihuahuana* from Durango, *P. apacheca* from Arizona, *P. monticola* from northern Idaho. Jour. Amer. Pharm. Assoc., Sci. Ed. 43(6):378-381.

(150) 1955 Composition of gum turpentines of pines, XXV. A report on two white pines; *Pinus koraiensis* from Korea and *P. peuce* from Macedonia. Jour. Amer. Pharm. Assoc., Sci. Ed. 45(2):77-81.

(151) 1955 Composition of gum turpentines of pines, XXVI. A report on *Pinus lawsoni* and *P. herrerai* from Michoacan, Mexico, and *P. ponderosa* from the California coast. Jour. Amer. Pharm. Assoc., Sci. Ed. 45(3):153-156.

(152) 1956 Composition of gum turpentines of pines, XXVIII. A report on *Pinus edulis* from eastern Arizona, *P. tropicalis* from Cuba, and *P. elliottii* var. *densa* from Florida. Jour. Amer. Pharm. Assoc., Sci. Ed. 45(9):629-634.

(153) 1955 Composition of gum turpentines of pines, XXIII. A report on three Mediterranean species: *Pinus pinea* (cultivated in California), *P. halepensis* (from Israel), and *P. brutia* from Cyprus). Jour. Amer. Pharm. Assoc., Sci. Ed. 44(3): 186-189.

MIROV, N. T., and ILOFF, P. M., JR., Cont'd.

(154) 1955 Composition of gum turpentine of pines, XXIV. A report on two Asiatic pines: *Pinus armandi* and *P. bungeana*. Jour. Amer. Pharm. Assoc., Sci. Ed. 44(7):424-427.

(155) 1958 Composition of gum turpentines of pines, XXIX. A report on *Pinus ponderosa* from five localities: central Idaho, central Montana, southeastern Wyoming, northwestern Nebraska, and central eastern Colorado. Jour. Amer. Pharm. Assoc., Sci. Ed. 47(6):404-409.

MIROV, N. T., ILOFF, P. M., JR., and GORDON, L. B.

(156) 1954 Composition of gum turpentine of pines, XVIII. A report on *Pinus pungens*, *P. glabra*, and *P. teocote*. Jour. Amer. Pharm. Assoc., Sci. Ed. 43(1):13-15.

MIROV, N. T., and KIMBROUGH, E. F.

(157) 1952 Sulfuric acid increases yield of gum of ponderosa pine. Jour. Forestry 50(2):132.

MIROV, N. T., and KRAEBEL, C. J.

(158) 1937 Collecting and propagating the seeds of California wild plants. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 18. 27 pp.

(159) 1939 Collecting and handling seeds of wild plants. CCC Forestry Pub. No. 5. 42 pp., illus.

MIROV, N. T., and LARSON, EGON.

(160) 1958 Possibilities of Mexican and Central American pines in the world reforestation projects. The Caribbean Forester 19(3,4):43-49, illus.

MIROV, N. T., and STANLEY, R. G.

(161) 1958 The pine tree. Ann. Rev. Plant Physiol. 10:223-238.

MIROV, N. T., and STOCKWELL, PALMER.

(162) 1939 Colchicine treatment of pine seeds. Jour. Hered. 30(9): 389-390.

MIROV, N.T., WANG, T. H., and HAAGEN-SMIT, A. J.

(163) 1949 Chemical composition of gum turpentines of pines: a report on *Pinus strobus*, *P. cembra*, *P. taeda*, *P. radiata*, and *P. virginiana*. Jour. Amer. Pharm. Assoc., Sci. Ed. 38(7): 403-407.

PACIFIC SOUTHWEST FOREST AND RANGE EXPERIMENT STATION.

(164) 1960 Visitors' guide to the Institute of Forest Genetics, Placerville, California. Rev. Ed. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Misc. Paper 5. 4 pp., illus.

PAVARI, ALDO.

(165) 1947 Horizontes de la genetica forestal (Developments in forest tree breeding). Montes, Madrid 3(18):517-523.

RIGHTER, F. I.

(166) 1932 Bisexual flowers among pines. Jour. Forestry 30(7):873, illus.

(167) 1932 A criticism of "A new principle in seed collecting for Norway pine" by C. G. Bates. Jour. Forestry 30(1): 39-46.

(168) 1934 On the cause of bird's eye maple. Jour. Forestry 32(5): 626-627.

(169) 1939 Early flower production among the pines. Jour. Forestry 37(12):935-938, illus.

(170) 1939 A simple method of making germination tests of pine pollen. Jour. Forestry 37(7):574-576, illus.

(171) 1945 *Pinus*: the relationship of seed size and seedling size to inherent vigor. Jour. Forestry 43(2):131-137, illus.

(172) 1946 New perspectives in forest tree breeding. Science 104(2688): 1-3.

(173) 1946 Review of "Forest tree breeding and genetics" by R. H. Richens. Jour. Forestry 44(12):1099-1100. (Same in Quart. Rev. Biol. 22(4):335-336.)

(174) 1954 Forest tree improvement research in California. Jour. Forestry 52(9):681-683, illus.

(175) 1955 Possibilities and limitations of hybridization in *Pinus*. Third Conf. on Forest Tree Impr. Proc. 1955:54-63.

(176) 1955 Tree improvement activities at Placerville, California, affecting southern species. Third Conf. on Forest Tree Impr. Proc. 1955:97-99.

(177) 1958 Summary of forest tree improvement work in California. Fifth Northeast Forest Tree Impr. Conf. Proc. 1958:22-24.

(178) 1960 Evidence of hybrid vigor in forest trees. Paper presented at Internatl. Conf. on Forest Tree Growth, Tucson, Ariz., 1960. [Proc. in press]

(179) (n.d.) Forest tree improvement through inbreeding and intraspecific and interspecific hybridization. Paper presented at Fifth World Forestry Cong. Seattle, Wash., 1960. [Proc. in press.]

RIGHTER, F. I., and CALLAHAM, R. Z.

(180) 1958 A California planting of progenies of "elite" and "non-elite" *Pinus radiata* from Australia. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 135. 3 pp.

RIGHTER, F. I., and DUFFIELD, J. W.

(181) 1951 Interspecies hybrids in pines. A summary of interspecific crossings in the genus *Pinus* made at the Institute of Forest Genetics. Jour. Hered. 42(2):75-80, illus.

(182) 1951 Hybrids between ponderosa and Apache pines. Jour. Forestry 49(5):345-349, illus.

RIGHTER, F. I., and STOCKWELL, PALMER.

(183) 1949 The fertile species hybrid, *Pinus murraybanksiana*. Madroño 10(3):65-69, illus.

SMITH, R. H.

(184) 1960 Resistance of pines to the pine reproduction weevil, *Cylindrocopturus eatoni*. Jour. Econ. Ent. 53(6): 1044-1048, illus.

(185) 1961 Techniques for determining the toxicity of pine resin vapors to *Dendroctonus brevicomis* and *D. jeffreyi*. Jour. Econ. Ent. 54(2):359-365, illus.

(186) 1961 The fumigant toxicity of three pine resins to *Dendroctonus brevicomis* and *D. jeffreyi*. Jour. Econ. Ent. 54(2): 365-369, illus.

STANLEY, R. G.

(187) 1957 Krebs cycle activity of mitochondria from endosperm of sugar pine seed (*Pinus lambertiana* Dougl.). Plant Physiol. 32(5):409-412, illus.

(188) 1957 Glucose metabolism in germinating pine pollen (*Pinus ponderosa*). Plant Physiol. 32:Sup. XLVI.

(189) 1958 Terpene formation in pine from mevalonic acid. Nature 182:738-739, illus.

(190) 1958 Gross respiratory and water uptake patterns in germinating sugar pine seed. Physiologia Plantarum. 11:503-515, illus.

(191) 1958 The physiology of forest trees. Methods and concepts applied to a study of flowering in pine. pp. 583-599, illus. New York.

(192) 1958 Symposium II, Biochemistry of Wood. Terpene formation in pine. IV Internatl. Cong. Biochem. 1958(II):48-55, illus.

(193) 1959 Metabolic studies of pine pollen and their potential application in tree breeding. IX Internatl. Bot. Cong. Proc. 1959(II):376.

(194) 1961 Terpene biogenesis in pine. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Tech. Paper 56. 13 pp., illus.

STANLEY, R. G., and BUTLER, W. L.

(195) 1961 Life processes of the living seed. U.S. Dept. Agr. Yearbook, 1961. pp. 88-94.

STANLEY, R. G., and CONN, E. E.

(196) 1957 Enzyme activity of mitochondria from germinating seedlings of sugar pine (*Pinus lambertiana* Dougl.). Plant Physiol. 32(5):412-418.

STANLEY, R. G., and MIROV, N. T.

(197) (n.d.) Terpene analysis by gas chromatography. Paper presented at 133rd meeting, Amer. Chem. Soc., San Francisco, Calif. 1958.

STANLEY, R. G., PETERSEN, J., and MIROV, N. T.
(198) 1960 Viability of pine pollen stored 15 years. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Res. Note 173. 5 pp.

STANLEY, R. G., and POOSTCHI, I.
(199) (n.d.) Endogenous carbohydrates, organic acids, and pine pollen viability. Silvae Genetica. [In press.]

STANLEY, R. G., and TRACEWELL, T.
(200) 1955 Manometer flask for measuring respiratory quotients. Science 122(3158):76-77, illus.

STANLEY, R. G., and YOUNG, L. C. T.
(201) 1958 Carbon dioxide fixation in germinating pine pollen. (Abs.) IV Internatl. Cong. Biochem. 1958:138.

STANLEY, R. G., YOUNG, L. C. T., and GRAHAM, J. S. D.
(202) 1958 Carbon dioxide fixation in germinating pine pollen (*Pinus ponderosa*). Nature (London) 182:1462-1463.

STOCKWELL, PALMER.
(203) 1939 Cone variation in Digger pine. Madroño 5(2):72-73, illus.
(204) 1939 Preembryonic selection in the pines. Jour. Forestry 37(7): 541-543, illus.
(205) 1939 Tree improvement by breeding. Western Shade Tree Conf. Proc. 1939:4953.
(206) 1942 *Pinus*: embryo size compared with growth rate. Amer. Nat. 76(765):431-432.
(207) 1946 Tree breeding. The Timberman 47(4):44, 45, 52.
(208) 1946 Review of "Forest tree breeding and genetics" by R. H. Richens. Madroño 8(6):205-206.
(209) 1947 The culture of cork oak in Spain. Econ. Bot. 1(4):381-388, illus.
(210) 1948 Review of "Introduction to genetics and cytogenetics" by Herbert Parkes Riley. Jour. Forestry 46(8):617-618.
(211) 1948 Pine breeding today. Southern Lumberman 177(2225):279-281.

STOCKWELL, PALMER, and RIGHTER, F. I.
(212) 1946 *Pinus*: the fertile species hybrid between knobcone and Monterey pines. Madroño 8(5):157-160.
(213) 1947 Hybrid forest trees. U.S. Dept. Agr. Yearbook 1943-1947: 465-472.

STOCKWELL, PALMER, and WALKER, CLYDE.
(214) 1948 The Institute of Forest Genetics. Parks and Recreation 31(7):388-391.

STONE, E. C., and DUFFIELD, J. W.
(215) 1950 Hybrids of sugar pine by embryo culture. Jour. Forestry 48(3):200-201.

STONE, E. C., SHACHORI, A. Y., and STANLEY, R. G.
(216) 1956 Water absorption by needles of ponderosa pine seedlings and its internal redistribution. Plant Physiology 31(2):120-126, illus.

U.S. FOREST SERVICE.
(217) 1948 Tree breeding at the Institute of Forest Genetics. U.S. Dept. Agr. Misc. Pub. 659. 14 pp., illus.

WEIDMAN, R. H.
(218) 1943 Watering plantation trees. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 31. 3 pp.
(219) 1947 Trees in the Eddy Arboretum. U.S. Forest Serv. Calif. Forest and Range Expt. Sta. Res. Note 53. 8 pp.

WEIDMAN, R. H., and BERRIMAN, C. R.
(220) 1944 Watering plantation trees. Jour. Forestry 42(6):435-537.

WEIDMAN, R. H., and ROBBINS, G. T.
(221) 1947 Attacks of pitch moth and turpentine beetle on pines in the Eddy Arboretum. Jour. Forestry 45(6):428-433.

Tichenor, Lucille M.
1962 Research at the Institute of Forest Genetics 1927 - 1961. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Misc. Paper 66. 15 pp.

A bibliography of 221 articles showing the results of research work done at the Institute of Forest Genetics, Placerville, California, by staff members and visitors from other parts of the world.

Tichenor, Lucille M.
1962 Research at the Institute of Forest Genetics 1927 - 1961. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Misc. Paper 66. 15 pp.

A bibliography of 221 articles showing the results of research work done at the Institute of Forest Genetics, Placerville, California, by staff members and visitors from other parts of the world.

Tichenor, Lucille M.
1962 Research at the Institute of Forest Genetics 1927 - 1961. U.S. Forest Serv. Pacific Southwest Forest and Range Expt. Sta. Misc. Paper 66. 15 pp.

A bibliography of 221 articles showing the results of research work done at the Institute of Forest Genetics, Placerville, California, by staff members and visitors from other parts of the world.